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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,695	06/28/2001	Liew Chuang Chiu	3918P017	9069

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EXAMINER

LIN, TINA M

ART UNIT PAPER NUMBER

2874

DATE MAILED: 06/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,695

Applicant(s)

CHIU ET AL.

Examiner

Tina M Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 40-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 and 7. 6) ☐ Other: _____

DETAILED ACTION

Applicant's election without traverse of claims 1-26 and 40-49 in Paper No. 13 is acknowledged. Claims 27-39 have been cancelled.

The information disclosure statements filed 19 September 2002 (paper no. 8), 20 September 2002 (paper no. 9), 23 September 2002 (paper no. 10), and 24 September 2002 (paper no. 11) fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. However, information disclosure statements filed 23 September 2002 (paper no. 5) and 16 December 2002 (paper no. 7) complies with 37 CFR 1.98(a)(2) and therefore has been considered.

New corrected drawings are required in this application because:

The drawings filed with this application on 14 January 2002, are objected to as being informal. Notice that all the labels on the figures are handwritten as well as the figure numbers. Correction is required in response to this office action. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-9, 11-22, 24-25, and 40-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,901,263 to Gaio et al. and further in view of U.S. Patent 6,364,709 B1 to Jones. In regards to claims 1, 2, 6, 7, 9, 13, 14, 19-22, and 40-47, Gaio et al. discloses a fiber optic module comprising of a latch to disengage and withdraw an optical module by sliding the module on an incline plane. Gaio et al. also discloses a tab that helps to determine which module in the assembly is to be removed and assists in the removal of the module. Gaio further discloses electro-optic transducers to convert optical signals to electrical ones and electrical signals into optical ones. Furthermore, the latch disclosed by Gaio et al. can be engaged and disengaged by pushing the latch from the lock or unlock position. Additionally, Gaio et al. discloses that the latch can be made of a metal or a polymeric material. (Column 3) But Gaio et al. fails to specifically disclose the optical fiber module to be withdrawn from a cage assembly and that the module is a SFP cage assembly. However, Jones discloses a SFP cage assembly to be connected to an optical module with the ability to convert optical signals to electrical signals, electrical signals to optical signals and with the ability to disengage the optical module. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art for the optical module to be withdrawn from a cage assembly and

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to use a SFP cage assembly. Gaio et al. also fails to disclose the pull-tab to include a shield to contain the EM radiation. However, Jones discloses that the cage to function as an EM shield for protection. (Column 1) Therefore, it would have been obvious at the time the invention was made to a person with ordinary skill in the art to have had a pull tab with a shield to contain EM radiation for protection.

In regards to claims 3, 4, 11, 15, 16, and 17, Gaio et al. discloses a pull mechanism but Gaio et al. and Jones fail to specifically disclose a push button or a kick actuator as the push actuator. However, since applicant has claimed two different types of push actuators, it is a non-critical feature of the invention. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have used any desirable and optimal push actuator. Furthermore, Gaio et al. and Jones fails to specifically disclose where the pull tab and push actuator is located. However, since Applicant discloses more than one possible location for the push actuator and the pull-tab to be located, it is a non-critical feature of the invention. Additionally, the top and bottom of a fiber optic module is a relative term that can be defined in numerous ways depending on the orientation of the device. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have placed the pull tab and push actuator in a desirable location.

In regards to claim 8, Gaio et al. and Jones also fail to disclose two actuators. However, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have a second actuator for disengaging and withdrawing each optical module. Furthermore, both of the actuators are to perform the same purpose of disengaging the optical fibers. Moreover, it has been held that mere duplication of essential working parts of a device

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involves only routine skill in the art. *St. Regis Paper Co. vs. Bemis Co.*, 193 USPQ 8. Gaio et al. and Jones also fail to disclose indicator marks on the module, which the actuator releases from. However, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have placed indicator marks in order to aid the technician to indicated if the optical module was released or not.

In regards to claims 12, 18, 24 and 25, Gaio et al. and Jones to disclose a nose having a grip to pull out the module, a pull grip having dimples to prevent slippage and a handle on the pull tab to grip it with one or more fingers. However, having a nose with a grip on the fiber module, a pull grip having dimples or a handle are all components to aid in the more careful removal of the fiber optic module. Especially when handling PCB boards and other sensitive electronic devices, it would be obvious at the time the invention was made to a person having ordinary skill in the art to have included the features, a nose with a grip or a pull grip with a handle or dimples, for the aid in careful removal of sensitive components.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,901,263 to Gaio et al. in view of U.S. Patent 6,364,709 B1 to Jones, in regards to claim 1 and in further view of U.S. Patent 6,335,869 B1 to Branch et al. Gaio et al. and Jones disclose all discussed above, but fail to disclose grooves to slidable engage the fiber optic module. However, Branch et al. does disclose a removable transceiver module with grooves (40) in the cage assembly for the module to slide into. Therefore, if there are grooves in the cage assembly, there must be grooves in the pull actuator as well in order for the grooves to lock into place. (Figure 2) Therefore, it would have been obvious at the time the invention was made to a person having

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ordinary skill in the art to have grooves in the pull actuator for the purpose of engaging a fiber optic module or withdraw a fiber optical module.

Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,901,263 to Gaio et al. in view of U.S. Patent 6,364,709 B1 to Jones, and in further view of U.S. Patent Application 2002/0062719 A1 to Friedman et al. Gaio et al. discloses inserting a fiber optic module into a holder assembly and pushing the module into the assembly. But Gaio et al. fails to disclose a cage assembly and a push button extending fully out to ensure the module is fully inserted. However, Jones discloses a SFP cage assembly to be connected to an optical module with the ability to convert optical signals to electrical signals, electrical signals to optical signals and with the ability to disengage the optical module. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art for the optical module to be withdrawn from a cage assembly and to use a SFP cage assembly. Furthermore, the concept of a push button extending fully out to ensure the module is fully inserted is a commonly known method. Friedman et al. discusses the insertion of one member into another member. A button protrudes outward when the first member has been connected to the second member. When the first member has not yet been connected, there is no button present and therefore nothing protrudes outwardly. Additionally, in order to fully insert the member, the member would have to be pushed fully into the other member. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have used a push button extending fully out to ensure the module is fully inserted.

Allowable Subject Matter

Claims 10, 23 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record fails to disclose or reasonably suggest a push actuator with a push tab, shaft coupled to the push tab and hook coupled to the shaft. The prior art of record fails to disclose or reasonably suggest a pull-tab with an arm coupled to the fiber module and a handle at the end of pull-tab. Lastly, the prior art of record fails to disclose a pull table with a pull grip, a lever arm coupled to the pull grip and a shield coupled to the lever arm and grounded.

Documents submitted by applicant in paper no. 6 and 7 in the Information Disclosure Statement have been considered and made of record. Note attached copy of form PTO-1449. None of the documents submitted by applicant discloses or reasonably suggests the contents of the allowable subject matter discussed above.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References D-F discuss other mechanical connections and latches that comprise a two-part assembly cage.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M Lin whose telephone number is (703) 305-1959. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (703) 308-4819. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

TML *TM*
June 12, 2003

Akmal
AKM ENAYET ULLAH
PRIMARY EXAMINER